

EXHIBIT 1



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/249,174	04/09/2014	Russell LEVI	3258	1073

77345	7590	01/27/2015
Graeser Associates International Inc.		
70 West Madison		
Suite 1400		
Chicago, IL 60602		

EXAMINER	
JAVOID, JAMAL	

ART UNIT	PAPER NUMBER
2412	

NOTIFICATION DATE	DELIVERY MODE
01/27/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

dgraeser@gai-ip.com

Office Action Summary	Application No. 14/249,174	Applicant(s) LEVI, RUSSELL	
	Examiner JAMAL JAVAID	Art Unit 2412	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/9/2014.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

- 5) ☒ Claim(s) 1-19 is/are pending in the application.
5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-19 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 4/9/2014 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) ☐ All b) ☐ Some** c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
Paper No(s)/Mail Date ____.
- 3) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 4) ☐ Other: ____.

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DETAILED ACTION

Status of Case

1. This Office Action is in response to the application being filed on 4/9/2014.
2. Claims 1-19 are pending. Claims 1, 13, and 19 are the independent claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 7, 9-13, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luo (USPN 7,469,294) in view of Knox (USPAN 2007/0225019) and Wu (USPAN 2008/0069065).

Consider claims 1 and 13, Luo disclose a method and computing apparatus for operating a single network adapter for use on a first sub-network and a second sub-network (**see elements 30 and 32, which are taken collectively to constitute said network adapter**), comprising:

setting up a first network address and routing table in the network adapter for use in the first sub-network (**see elements 108 and 110 in figure 5 and col. 3 lines 36-40, col. 3 lines 50-54, col. 4 lines 59-67, and col. 6 lines 19-30, wherein disclosed is said first routing table**);

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setting up a second network address and routing table in the network adapter for use in the second sub-network (**see elements 108 and 110 in figure 5 and col. 3 lines 36-40, col. 3 lines 50-54, col. 4 lines 59-67, and col. 6 lines 19-30, wherein disclosed is said second routing table**);

using the network adaptor to receive data for one of the first and second sub-networks, and re-transmit the data to the other of the first and second sub-network, using the network addresses and routing tables (**see col. 5 lines 24-28, wherein disclosed is that the VGH operates as a provider edge (PE) router and receives data from the remote user from one sub-network and forwards it to the second sub-network**);

wherein the first sub-network includes a network gateway (**see element 30 in figure 3, which is a gateway that is in the first sub-network**) and the network adapter controls access from the second sub-network to the network gateway (**see col. 5 lines 24-28, wherein disclosed is that the VGH operates as a provider edge (PE) router and receives data from the remote user from one sub-network and forwards it to the second sub-network**),

wherein the step of receiving data comprises receiving a request from a user via the second sub-network to access the gateway on the first sub-network (**see element 100 in figure 5 and col. 3 lines 22-26, wherein disclosed is receiving a request at the VGH from a remote user for connection with a virtual private network**), verifying the user's access rights (**see col. 3 lines 26-29 and col. 6 lines 10-12, wherein disclosed is authenticating the remote user**), and allowing the user to

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access the gateway if and only if the user is entitled to access the gateway (**see elements 102 and 104 in figure 5 and col. 6 lines 14-15, wherein disclosed is that a successful authorization operation associates the remote user with a VPN**), or blocking the user access to the gateway if the user is not entitled to access the gateway (**see elements 102 and 103 in figure 5 and col. 6 lines 11-12, wherein disclosed is terminating the session if the user is not authorized by the VHG**).

Luo does not specifically disclose that the network adapter is configured as a hotspot controller.

Knox teaches that a network adapter is configured as a hotspot controller (**see paragraph 0034, wherein disclosed is that the mobile device 50 may serve as a hub or hot spot, i.e. configured as a hotspot controller**), and *further teaches*

setting up a network address and routing table in the network adapter (**see paragraph 0034, wherein disclosed is that the mobile device 50 maintains a record of the address routing table for the network, which it can transmit to an intelligent base station 20**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Luo and have that a network adapter is configured as a hotspot controller, as taught by Knox, thus allowing control of hotspot connections in a wireless communication system, as well as enabling internet based applications to run in a high-speed mobile environment and function as if they were on a traditional, stationary, wired network and was designed with a layered self-healing router to enhance optimum performance (**see paragraph 0002**).

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Luo and Knox do not specifically disclose a single network adapter comprising a single network interface card or module.

Wu teaches a single network adapter comprising a single network interface card or module **(see paragraph 0026, wherein disclosed is using a single wireless network interface adaptor, which is disclosed to refer to a network card)**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined inventions of Luo and Knox and have a single network adapter comprising a single network interface card or module, as taught by Wu, thus providing a method of seamlessly roaming between multiple wireless networks using a single wireless interface adaptor for use with wireless roaming in real-time communication environments **(see paragraph 0009 of Wu)**.

Consider claims 7 and 17, Luo discloses that the verifying comprises retrieving locally or remotely stored user subscription information or information about user permission to access the gateway **(see col. 6 lines 10-17, wherein disclosed is authoring the remote user either locally or by sending a request to the SP AAA server, i.e. remotely)**.

Consider claim 9, Luo discloses performing the method by executing driver software to configure a standard network adapter to exchange network traffic between the first and second sub-networks **(see col. 4 lines 15-17 and col. 5 lines 34-36, wherein disclosed is said software that can be executed to perform the teachings**

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of Luo, such as exchanging network traffic between the first and second sub-networks, as disclosed in col. 5 lines 24-28).

Consider claims 10 and 18, Luo discloses that the step of receiving data comprises authorising and authenticating a user **(see col. 3 lines 26-29 and col. 6 lines 10-12, wherein disclosed is authorizing/authenticating the remote user).**

Consider claim 11, Luo discloses that the second sub-network includes a plurality of devices, said plurality of devices incorporating a respective plurality of network interface cards or modules, said network interface card or module being configured to communicate directly with said plurality of network interface cards or modules **(see figure 3).**

Consider claim 12, Luo, in view of Wu, discloses that the first sub-network and second sub-network are within wireless communication range of said single network interface card or module **(see figure 3).**

Consider claim 19, Luo disclose a method for operating a single network adapter for use on a first sub-network and a second sub-network of the same type **(see elements 30 and 32, which are taken collectively to constitute said network adapter)**, the second sub-network including a plurality of devices, said plurality of devices incorporating a respective plurality of network interface cards or modules, said



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JAVAI, JAMAL	

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Status

- 1) ☒ Responsive to communication(s) filed on 4/9/2014.
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Disposition of Claims*

- 5) ☒ Claim(s) 1-19 is/are pending in the application.
5a) Of the above claim(s) ____ is/are withdrawn from consideration.
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Application Papers

- 10) ☐ The specification is objected to by the Examiner.
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Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) ☐ All b) ☐ Some** c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
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DETAILED ACTION

Status of Case

1. This Office Action is in response to the application being filed on 4/9/2014.
2. Claims 1-19 are pending. Claims 1, 13, and 19 are the independent claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 7, 9-13, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luo (USPN 7,469,294) in view of Knox (USPAN 2007/0225019) and Wu (USPAN 2008/0069065).

Consider claims 1 and 13, Luo disclose a method and computing apparatus for operating a single network adapter for use on a first sub-network and a second sub-network (**see elements 30 and 32, which are taken collectively to constitute said network adapter**), comprising:

setting up a first network address and routing table in the network adapter for use in the first sub-network (**see elements 108 and 110 in figure 5 and col. 3 lines 36-40, col. 3 lines 50-54, col. 4 lines 59-67, and col. 6 lines 19-30, wherein disclosed is said first routing table**);

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setting up a second network address and routing table in the network adapter for use in the second sub-network (**see elements 108 and 110 in figure 5 and col. 3 lines 36-40, col. 3 lines 50-54, col. 4 lines 59-67, and col. 6 lines 19-30, wherein disclosed is said second routing table**);

using the network adaptor to receive data for one of the first and second sub-networks, and re-transmit the data to the other of the first and second sub-network, using the network addresses and routing tables (**see col. 5 lines 24-28, wherein disclosed is that the VGH operates as a provider edge (PE) router and receives data from the remote user from one sub-network and forwards it to the second sub-network**);

wherein the first sub-network includes a network gateway (**see element 30 in figure 3, which is a gateway that is in the first sub-network**) and the network adapter controls access from the second sub-network to the network gateway (**see col. 5 lines 24-28, wherein disclosed is that the VGH operates as a provider edge (PE) router and receives data from the remote user from one sub-network and forwards it to the second sub-network**),

wherein the step of receiving data comprises receiving a request from a user via the second sub-network to access the gateway on the first sub-network (**see element 100 in figure 5 and col. 3 lines 22-26, wherein disclosed is receiving a request at the VGH from a remote user for connection with a virtual private network**), verifying the user's access rights (**see col. 3 lines 26-29 and col. 6 lines 10-12, wherein disclosed is authenticating the remote user**), and allowing the user to

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access the gateway if and only if the user is entitled to access the gateway (**see elements 102 and 104 in figure 5 and col. 6 lines 14-15, wherein disclosed is that a successful authorization operation associates the remote user with a VPN**), or blocking the user access to the gateway if the user is not entitled to access the gateway (**see elements 102 and 103 in figure 5 and col. 6 lines 11-12, wherein disclosed is terminating the session if the user is not authorized by the VHG**).

Luo does not specifically disclose that the network adapter is configured as a hotspot controller.

Knox teaches that a network adapter is configured as a hotspot controller (**see paragraph 0034, wherein disclosed is that the mobile device 50 may serve as a hub or hot spot, i.e. configured as a hotspot controller**), and *further teaches*

setting up a network address and routing table in the network adapter (**see paragraph 0034, wherein disclosed is that the mobile device 50 maintains a record of the address routing table for the network, which it can transmit to an intelligent base station 20**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Luo and have that a network adapter is configured as a hotspot controller, as taught by Knox, thus allowing control of hotspot connections in a wireless communication system, as well as enabling internet based applications to run in a high-speed mobile environment and function as if they were on a traditional, stationary, wired network and was designed with a layered self-healing router to enhance optimum performance (**see paragraph 0002**).

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Luo and Knox do not specifically disclose a single network adapter comprising a single network interface card or module.

Wu teaches a single network adapter comprising a single network interface card or module **(see paragraph 0026, wherein disclosed is using a single wireless network interface adaptor, which is disclosed to refer to a network card)**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined inventions of Luo and Knox and have a single network adapter comprising a single network interface card or module, as taught by Wu, thus providing a method of seamlessly roaming between multiple wireless networks using a single wireless interface adaptor for use with wireless roaming in real-time communication environments **(see paragraph 0009 of Wu)**.

Consider claims 7 and 17, Luo discloses that the verifying comprises retrieving locally or remotely stored user subscription information or information about user permission to access the gateway **(see col. 6 lines 10-17, wherein disclosed is authoring the remote user either locally or by sending a request to the SP AAA server, i.e. remotely)**.

Consider claim 9, Luo discloses performing the method by executing driver software to configure a standard network adapter to exchange network traffic between the first and second sub-networks **(see col. 4 lines 15-17 and col. 5 lines 34-36, wherein disclosed is said software that can be executed to perform the teachings**

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of Luo, such as exchanging network traffic between the first and second sub-networks, as disclosed in col. 5 lines 24-28).

Consider claims 10 and 18, Luo discloses that the step of receiving data comprises authorising and authenticating a user **(see col. 3 lines 26-29 and col. 6 lines 10-12, wherein disclosed is authorizing/authenticating the remote user).**

Consider claim 11, Luo discloses that the second sub-network includes a plurality of devices, said plurality of devices incorporating a respective plurality of network interface cards or modules, said network interface card or module being configured to communicate directly with said plurality of network interface cards or modules **(see figure 3).**

Consider claim 12, Luo, in view of Wu, discloses that the first sub-network and second sub-network are within wireless communication range of said single network interface card or module **(see figure 3).**

Consider claim 19, Luo disclose a method for operating a single network adapter for use on a first sub-network and a second sub-network of the same type **(see elements 30 and 32, which are taken collectively to constitute said network adapter)**, the second sub-network including a plurality of devices, said plurality of devices incorporating a respective plurality of network interface cards or modules, said

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network interface card or modules being configured to communicate directly with said plurality of network interface cards or modules (**see figure 3**), the method comprising:

setting up a first network address and routing table in the network adapter for use in the first sub-network (**see elements 108 and 110 in figure 5 and col. 3 lines 36-40, col. 3 lines 50-54, col. 4 lines 59-67, and col. 6 lines 19-30, wherein disclosed is said first routing table**);

setting up a second network address and routing table in the network adapter for use in the second sub-network (**see elements 108 and 110 in figure 5 and col. 3 lines 36-40, col. 3 lines 50-54, col. 4 lines 59-67, and col. 6 lines 19-30, wherein disclosed is said second routing table**);

using the network adaptor to receive data for one of the first and second sub-networks, and re-transmit the data to the other of the first and second sub-network, using the network addresses and routing tables (**see col. 5 lines 24-28, wherein disclosed is that the VGH operates as a provider edge (PE) router and receives data from the remote user from one sub-network and forwards it to the second sub-network**);

wherein the first sub-network includes a network gateway (**see element 30 in figure 3, which is a gateway that is in the first sub-network**) and the network adapter controls access from the second sub-network to the network gateway (**see col. 5 lines 24-28, wherein disclosed is that the VGH operates as a provider edge (PE) router and receives data from the remote user from one sub-network and forwards it to the second sub-network**),

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wherein the step of receiving data comprises receiving a request from a user via the second sub-network to access the gateway on the first sub-network (**see element 100 in figure 5 and col. 3 lines 22-26, wherein disclosed is receiving a request at the VGH from a remote user for connection with a virtual private network**), verifying the user's access rights (**see col. 3 lines 26-29 and col. 6 lines 10-12, wherein disclosed is authenticating the remote user**), and allowing the user to access the gateway if and only if the user is entitled to access the gateway (**see elements 102 and 104 in figure 5 and col. 6 lines 14-15, wherein disclosed is that a successful authorization operation associates the remote user with a VPN**), or blocking the user access to the gateway if the user is not entitled to access the gateway (**see elements 102 and 103 in figure 5 and col. 6 lines 11-12, wherein disclosed is terminating the session if the user is not authorized by the VHG**).

Luo does not specifically disclose that the network adapter is configured as a hotspot controller.

Knox teaches that a network adapter is configured as a hotspot controller (**see paragraph 0034, wherein disclosed is that the mobile device 50 may serve as a hub or hot spot, i.e. configured as a hotspot controller**), and *further teaches*

setting up a network address and routing table in the network adapter (**see paragraph 0034, wherein disclosed is that the mobile device 50 maintains a record of the address routing table for the network, which it can transmit to an intelligent base station 20**).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Luo and have that a network adapter is configured as a hotspot controller, as taught by Knox, thus allowing control of hotspot connections in a wireless communication system, as well as enabling internet based applications to run in a high-speed mobile environment and function as if they were on a traditional, stationary, wired network and was designed with a layered self-healing router to enhance optimum performance **(see paragraph 0002)**.

Luo and Knox do not specifically disclose a single network adapter comprising a single network interface card or module.

Wu teaches a single network adapter comprising a single network interface card or module **(see paragraph 0026, wherein disclosed is using a single wireless network interface adaptor, which is disclosed to refer to a network card)**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined inventions of Luo and Knox and have a single network adapter comprising a single network interface card or module, as taught by Wu, thus providing a method of seamlessly roaming between multiple wireless networks using a single wireless interface adaptor for use with wireless roaming in real-time communication environments **(see paragraph 0009 of Wu)**.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luo (USPN 7,469,294) in view of Knox (USPAN 2007/0225019), Wu (USPAN 2008/0069065), and Biswas (USPAN 2007/0019540).

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Consider claim 2, Luo discloses a first sub-network and a second sub-network **(see figure 3, wherein disclosed are said first and second sub-networks)**, wherein the second sub-network comprises a routable sub-network **(see figure 3, wherein the second sub-network comprises a routable sub-network from elements 50/54/56/60 to elements 52/58/62 to element 30)**.

Luo, Knox, and Wu combined do not specifically disclose a NAT routable sub-network, which is subservient to a first sub-network.

Biswas teaches a NAT routable sub-network, which is subservient to a first sub-network **(see abstract and figure 1, wherein disclosed are active and redundant network devices, each of which comprise a NAT, wherein each of said network devices are taken to be in a separate sub-network and the redundant network device in the second sub-network is subservient to the active network device in the first sub-network)**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined inventions of Luo, Knox, and Wu and have a NAT routable sub-network, which is subservient to a first sub-network, as taught by Biswas, thus providing network address translation in a sub-network, as well as implementing redundancy based routing in an environment that uses NAT across different address spaces **(see paragraph 0002)**.

6. Claims 3 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luo (USPN 7,469,294) in view of Knox (USPAN 2007/0225019), Wu (USPAN 2008/0069065), Geoffrion (USPAN 2005/0182839), and Dutta (USPN 7,296,091).

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Consider claims 3 and 14, Luo, Knox, and Wu combined do not specifically disclose generating broadcasts to inform wireless stations about an internet gateway.

Geoffrion teaches generating broadcasts to inform wireless stations about an internet gateway **(see paragraphs 0102-0103, wherein disclosed is said generating of broadcasts for said purpose of informing wireless stations about said gateway).**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined inventions of Luo, Knox, and Wu and have generating broadcasts to inform wireless stations about an internet gateway, as taught by Geoffrion, thus providing a method for providing a larger bandwidth to users in order to be able to share large amount of data without requiring a large amount of overhead traffic **(see paragraphs 0006 and 0010).**

Luo, Knox, Wu, and Geoffrion combined do not specifically disclose that the network gateway is provided by a wireless internet router or sending the broadcasts to the wireless internet router for forwarding to the wireless network.

Dutta teaches that the network gateway is provided by a wireless internet router **(see col. 9 lines 18-29, wherein disclosed is that the Internet gateway is a router)** and sending the broadcasts to the wireless internet router for forwarding to the wireless network **(see col. 9 lines 18-29, wherein disclosed is that the broadcasts are transmitted to the Internet gateway, which is a router, located near the server's location).**

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined inventions of Luo, Knox, Wu, and Geoffrion and have that the network gateway is provided by a wireless internet router and sending the broadcasts to the wireless internet router for forwarding to the wireless network, as taught by Dutta, thus providing a method for utilizing network multicast communication for providing the broadcast of content between a broadcast source and a client to avail a global content and/or a local content to users **(see col. 1 lines 7-12)**.

7. Claims 4-5 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luo (USPN 7,469,294) in view of Knox (USPAN 2007/0225019), Wu (USPAN 2008/0069065), Geoffrion (USPAN 2005/0182839), Dutta (USPN 7,296,091), and Regan (USPAN 2006/0023730).

Consider claims 4 and 15, Luo, Knox, Wu, Geoffrion, and Dutta combined do not specifically disclose generating and sending broadcasts on the wireless network at a sufficient rate to override broadcasts from the wireless internet router which indicates the wireless internet router to be an internet gateway.

Regan teaches generating and sending broadcasts on the wireless network at a sufficient rate to override broadcasts from the wireless internet router which indicates the wireless internet router to be an internet gateway **(see figures 2 and 5 and paragraphs 0012, 0014, and 0033-0038, wherein disclosed is said generating and sending of broadcasts at said sufficient rate to override broadcasts from the wireless router)**.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined inventions of Luo, Knox, Wu, Geoffrion, and Dutta and have generating and sending broadcasts on the wireless network at a sufficient rate to override broadcasts from the wireless internet router which indicates the wireless internet router to be an internet gateway, as taught by Regan, thus providing a method for differential updates for data broadcasting **(see paragraph 0001)**.

Consider claims 5 and 16, Luo, Knox, Wu, Geoffrion, and Dutta combined do not specifically disclose automatically detecting packets on at least one of the first and second sub-networks that are not using the hotspot controller as the network gateway and automatically adjusting the frequency of the broadcasts on the wireless network which set the network adapter as the network gateway according to the number of such packets that are detected.

Regan teaches automatically detecting packets on at least one of the first and second sub-networks that are not using the hotspot controller as the network gateway and automatically adjusting the frequency of the broadcasts on the wireless network which set the network adapter as the network gateway according to the number of such packets that are detected **(see figures 2 and 5 and paragraphs 0012, 0014, and 0033-0038, wherein disclosed is said detecting of packets via receiving profile information, received through packets, and then adjusting a rate of recurrence of broadcast information according to the detected packets)**.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined inventions of Luo, Knox, Wu, Geoffrion, and Dutta and have automatically detecting packets on at least one of the first and second sub-networks that are not using the hotspot controller as the network gateway and automatically adjusting the frequency of the broadcasts on the wireless network which set the network adapter as the network gateway according to the number of such packets that are detected, as taught by Regan, thus providing a method for differential updates for data broadcasting **(see paragraph 0001)**.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luo (USPN 7,469,294) in view of Knox (USPAN 2007/0225019), Wu (USPAN 2008/0069065), Geoffrion (USPAN 2005/0182839), Dutta (USPN 7,296,091), and Klamer (USPAN 2005/0163223).

Consider claim 6, Luo, Knox, Wu, Geoffrion, and Dutta combined do not specifically disclose receiving a user instruction to adjust the rate of generating and sending broadcasts and adjusting said rate according to the user instruction.

Klamer teaches receiving a user instruction to adjust the rate of generating and sending broadcasts and adjusting said rate according to the user instruction **(see paragraph 0030, wherein the transcoder allows the user to adjust the bit rates, frame rates, and broadcast format of data)**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined inventions of Luo, Knox, Wu, Geoffrion, and Dutta and have receiving a user instruction to adjust the rate of generating and

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sending broadcasts and adjusting said rate according to the user instruction, as taught by Klamer, thus providing an apparatus that can store data on network-accessible storage devices and transcode data between formats (**see paragraph 0005**).

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luo (USPN 7,469,294) in view of Knox (USPAN 2007/0225019), Wu (USPAN 2008/0069065), and Dutta (USPN 7,296,091).

Consider claim 8, although Luo discloses the gateway for users connecting via the second sub-network (**see above**), Luo, Knox, and Wu combined do not specifically disclose controlling the allocated bandwidth.

Dutta teaches controlling an allocated bandwidth (**see col. 5 lines 1-4, wherein disclosed is said bandwidth control**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined inventions of Luo, Knox, and Wu and have controlling an allocated bandwidth, as taught by Dutta, thus providing a method for utilizing network multicast communication for providing the broadcast of content between a broadcast source and a client to avail a global content and/or a local content to users (**see col. 1 lines 7-12**).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamal Javaid whose telephone number is 571-270-5137 and email address is Jamal.Javaid@uspto.gov.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Jiang, can be reached on 571-270-7191. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/JAMAL JAVAID/

Primary Examiner, Art Unit 2412